SANTA CLARA COUNTY

2008 WMA Base Funding Work Plan

Member of the Santa Clara County Weed Management Area

January 1, 2009 - December 31, 2009

Contract Lead Group and Contact Person(s):

Santa Clara County Division of Agriculture Eric Wylde, Supervising Agricultural Biologist 408.918.4626 Eric.Wylde@aem.sccgov.org 1553 Berger Drive, Bldg. 1 San Jose, CA 95112

Project Manager (contact for reporting and invoicing) and contact information:

Santa Clara County Division of Agriculture Eric Wylde, Supervising Agricultural Biologist 408.918.4626 Eric.Wylde@aem.sccgov.org 1553 Berger Drive, Bldg. 1 San Jose, CA 95112

WMA Group affiliated with: Santa Clara County Weed Management Area

Please Confirm, All projects described in this work plan will be in one contract with (if more than one contract is desired, please describe here): Confirmed, 1 contract with Santa Clara County Division of Agriculture

Proposed Projects

Project Title - Illyrian Thistle Eradication on County Lands

Project Goal: To eradicate an historic population of Illyrian thistle, *Onopordum illyricum*, in the English Town area of Almaden Quicksilver County Park, and prevent its spread into adjacent private and county, open space and rangeland.

Santa Clara County Weed Management Area members will coordinate their efforts to eradicate Illyrian thistle completely from Santa Clara County. This is the only Illyrian thistle infestation in the state of California and is limited to a few plants scattered over approximately 8 acres of county park property. By eradicating the infestation, the Santa Clara County Weed Management Area will prevent its spread into surrounding open space and rangeland. This will protect the forage quality of nearby rangeland, and will also protect the native plant communities and associated pollinator species found within serpentine outcroppings that surround the site.

Left unchecked, Illyrian thistle grows into tall, impenetrable stands. The seeds of Illyrian thistle can remain viable for 20+ years. Therefore, in order to avoid a long-term eradication program, it is critical that the plants within the infestation area not be allowed to go to seed. Native

vegetation, and associated wildlife, would be negatively impacted. Infestation of grazing areas would have a negative impact on the cattle industry. Due to the limited distribution of Illyrian thistle, surveying and hand-digging to eradicate this weed is critical and feasible.

A computerized GIS map of the project site will be created with the locations of detected Illyrian thistle plants. We will follow CDFA's weed monitoring protocol, counting the individual plants detected.

Project Title: Eradicate Iberian and Purple Starthistles from the Calaveras Watershed

<u>Project Goal</u>: To eradicate scattered, small, intermingled populations of A-rated Iberian starthistle and B-rated Purple starthistle from the 12.7 acre project area through integrated weed management techniques.

Eradication efforts are critical to prevent these invasive noxious weeds from further encroachment into county rangelands. Control methods are coordinated with the agencies involved to stop the spread of *Centaurea iberica* and *C. calcitrapa*, using chemical methods or mechanical removal, depending on the treatment area location and size of infestation.

The project area is within actively-grazed rangeland in north-eastern Santa Clara County. *Centaurea* species produce allelopathic effects and are highly competitive with other plants, often displacing desired vegetation. These plants replace palatable species in some grazed areas, and dense stands of mature plants can make areas inaccessible to livestock and humans. Eradication of these *Centaurea* species from the Calaveras watershed will enhance the carrying capacity for livestock grazing and will eliminate the seed source for potential spread of these species into adjacent park and open space properties.

We will survey previous infestation sites for Iberian and Purple starthistle. Survey will continue outside the original infestation area to determine the possible spread of the starthistles.

A computerized GIS map of the project site will be created with the locations of detected Iberian and Purple starthistle plants/populations. We will follow CDFA's weed monitoring protocol, conducting percent cover assessments and/or individual plant counts, as appropriate.

Project Title - Invasive Plant Species Management and Public Outreach on the Pearson-Arastradero Preserve

Project Goal: To continue management and/or containment of the following species:

Aegilops cylindrica, Jointed goatgrass was found on the preserve for the first time in 2005. A small population (~15 meter long x 1 meter wide) was discovered along a popular mountain biking trail called the Bowl Loop trail. The species identification was confirmed as the first observation of this species in Santa Clara County by the Botany lab at the California Department of Food and Agriculture. Carduus pycnocephalus, Italian Thistle has occurred on the preserve for many years. Its population appears to be significantly increasing. This species has decreased the success of the native plants by invading space, taking up water, and continues to spread by seed each time the restoration site is entered. Centaurea solstitialis, Yellow starthistle has occurred on the preserve for many years and its population appears to be increasing in some areas. Conium maculatum, Poison Hemlock has occurred on the preserve for many years but

usually only in small populations. In 2006, its population appeared to be significantly increasing throughout the preserve, especially in highly-disturbed soil and in our high value sites. *Dittrichia gravelons*, Stinkwort, has been found in several areas on and near the Preserve. Mapping, containment and/or eradication of this species is desired top prevent its spread into high value sites.

Information on the best practices in eradication and containment will be researched and compiled into an integrated weed management plan. Management and data collection techniques will include vegetation and photo monitoring, GPS mapping of each population, flagging and signing each population (if feasible) with information for the general public. We will use methods of control such as mowing, weed whipping, hand pulling, solarization, flaming, sheet-mulching, native grass straw cover, and biological controls. We will document the effects of control methods with photos, data sheets, and quantitative measurements in quadrats (where feasible). Finally, we will share best practices with other agencies and organizations that are addressing the same weed species.

Create flyers and conduct outreach and education regarding our target weeds to neighbors and Preserve users.